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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

09/176,315

10/22/98

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EXAMINER

0057-2362-2Y

PAPER NUMBER

022850 MMC2/1220

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ART UNIT

2811

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DATE MAILED:

12/20/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Application No. 09/176,315

Applicant(s)

Maeda et al.

Office Action Summary

Examiner

Sara W. Crane

Group Art Unit 2811



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DETAILED ACTION

Allowable Subject Matter

Claims 6-16 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamatsu et al. (High-Speed 0.5 μ m . . .) in view of Agari (JA 6-224302) and Chen et al.

The Iwamatsu reference teaches each of the structural elements of claims 1 and 2, including an SOI MOS transistor having a fixed potential at the body contact (see i.e. figure 1 and page 575, column 1, lines 12-15). A clock would be inherent in the teaching, or at least obvious, because signal must be clocked through the device at some frequency. The abstract teaches a maximum operation frequency of 2.1 GHz. Agari teaches in the abstract to design a semiconductor device by minimizing RC delay from the resistance value and the capacitance value at each wiring part. Chen et al. teaches at column 7, lines 29-34, to dope the body of an SOI MOS transistor minimize the RC time constant due to the body link. It would have been obvious

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to design the Iwamatsu device using a method which minimizes the RC time constant of each

wiring part, as taught by Agari, and in particular of the body contact as taught by Chen et al., in

order to minimize delay as taught by Agari. It would be obvious to minimize the RC time

constant as compared to the period of the clock signal, because the RC time constant is a measure

of how quickly signal decay takes place, and if the signal decays greatly during the time period of

the signal, the device will not function.

Conclusion

Applicant's arguments with respect to claims 1-5 and 18 have been considered but are

moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to S. Crane, whose telephone number is (703) 308-4894.

The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist, whose telephone number is (703) 308-0956.

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